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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,153	12/19/2003	Mark J. Enzmann	8C20.1-200	6011

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GARDNER GROFF, P.C.
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EXAMINER

DESIR, PIERRE LOUIS

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/742,153

Applicant(s)

ENZMANN, MARK J.

Examiner

Pierre-Louis Desir

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "the method of claim 10" in the first line of the claim.

There is insufficient antecedent basis for this limitation in the claim.

Note: for the process of examination, "the method of claim 10" will be interpreted as "the method of claim 8."

3. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites the limitation "the second logic...configured to switch a call connection from an address associated with the 802.1x network to an address associated with the cellular network when the first logic determines that a call handoff is to occur from the cellular network to the 802.1x network." The claim limitation is not clear as to how a switch will be performed on a call connection from an address associated with the 802.1x network to an address associated with the cellular network when the call handoff occurs from the cellular network to the 802.1 network. If a determination were made that a call handoff should occur from the cellular network

Art Unit: 2681

to the 802.1x network, one would conceptualize that handoff would result in a switch of a call connection from an address associated with 802.1x network to an address associated to the cellular network.

Note: for the process of examination examiner would interpret “configured to switch a call connection from an address associated with the 802.1x network to an address associated with the cellular network when the first logic determines that a call handoff is to occur from the cellular network to the 802.1x network” as “configured to switch a call connection from an address associated with the cellular network to an address associated with the 802.1x network when the first logic determines that a call handoff is to occur from the cellular network to the 802.1x network.”

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Jagadeesan et al. (Jagadeesan), Pub. No. US 20050059400.

Regarding claim 1, Jagadeesan discloses a wireless device having both cellular capability and 802.1x capability (i.e., mobile station 12 includes dual-mode technology to support transition

Art Unit: 2681

from one network to another) (see fig. 1, page 2, paragraphs 14 and 16), the wireless device comprising: a signal strength detection circuit configured to detect when a strength of an 802.1x signal transmitted by an access point of an 802.1x network drops below a certain level (i.e., the mobile station monitors if the link quality indicators of WLAN link is less than a handoff trigger threshold) (see page 4, paragraph 35) and when a strength of a cellular signal transmitted by a cellular network is above a certain level (i.e., monitoring if the cellular link is greater than a cellular link minimum threshold) (see page 4, paragraph 35); and a handoff initiation circuit configured to initiate a handoff of a call from the 802.1x network to the cellular network (i.e., call is handed off to the cellular network. Also, controller may also access information maintained within memory to monitor qualities of links between mobile station and other networks to determine appropriate times to handoff a call between such networks) (see page 3, paragraph 29, and page 4, paragraph 35).

Regarding claim 2, Jagadeesan discloses a device (see claim 1 rejection) wherein the handoff initiation circuit initiates the call handoff upon receiving an indication from the signal strength detection circuit (see page 6, paragraph 48).

Regarding claim 3, Jagadeesan discloses a device (see claim 1 rejection) wherein the handoff initiation circuit initiates the call handoff upon determining that a handoff selector has been activated by a user of the wireless device (i.e., Jagadeesan discloses that configuration information includes parameters used by an algorithm to determine an appropriate time to handoff a call from WLAN to cellular network, wherein a user may manually tune one or more of such parameters through knob. Thus, the user may manually activate a handoff selector through knob) (see page 4, paragraph 30, and page 5, paragraph 40).

Regarding claim 4, Jagadeesan discloses a device (see claim 1 rejection) wherein the signal strength detection circuit is configured to detect when a strength of a cellular signal transmitted by a cellular network drops below a certain level (i.e., when the quality of cellular link is less than a handoff trigger threshold) (see page 5, paragraph 42) and when a strength of an 802.1x signal transmitted by an 802.1x network is above a certain level (i.e., when the quality of WLAN link is greater than a minimum WLAN link quality threshold) (see page 5, paragraph 42), and wherein the handoff initiation circuit initiates a call handoff from the cellular network to the 802.1x network upon receiving an indication from the signal strength detection circuit (see page 3, paragraph 29, and page 5, paragraph 42).

Regarding claim 5, Jagadeesan discloses a method for handing off a call from an 802.1x network to a cellular network (see abstract), the method being performed by a wireless device (i.e., mobile station 12) (see fig. 2), the method comprising: measuring the strength of an 802.1x signal received by the wireless device from an access point of the 802.1x network (i.e., mobile station measures the link quality) (see page 4, paragraph 35); determining whether the strength of the 802.1x signal has dropped below a certain level (i.e., the mobile station monitors the link quality indicators of access points with which the mobile station currently has an active connection, wherein the link quality of WLAN link may be greater or less than a handoff trigger threshold) (see page 4, paragraph 35); measuring a strength of a cellular signal being received by the wireless device from a cellular network (i.e., monitoring the quality of the cellular link) (see page 4, paragraph 35); determining whether the strength of the cellular signal is above a certain level (i.e., monitoring if the cellular link is greater than a cellular link minimum threshold) (see page 4, paragraph 35); and wherein if the 802.1x signal strength is determined to be below a

certain level and the cellular signal strength is determined to be above a certain level, initiating a call handoff of the wireless device from the 802.1x network to the cellular network (see abstract, and page 3, paragraph 29, and page 4, paragraph 35, and page 6, paragraph 48).

Regarding claim 6, Jagadeesan discloses a method (see claim 5 rejection) further comprising: after the handoff has occurred, severing the connection between the wireless device and the access point of the 802.1x network (i.e., connection with WLAN network becomes inactive) (see page 5, paragraph 36).

Regarding claim 7, Jagadeesan discloses a method (see claim 6 rejection) further comprising: if a determination is made that the strength of the 802.1x signal has dropped below a certain level and that the strength of the cellular signal is above a certain level (see page 4, paragraph 35), the wireless device querying the cellular network for signaling and IP connectivity information (knowing that mobile station monitors link quality indicators of both WLAN link and cellular link, and that a handoff may be triggered when WLAN VOIP quality of service drops below an acceptable level, one skilled in the art would unhesitatingly conceptualize that the wireless device inherently query the cellular network for signaling and IP connectivity through the monitoring of the link quality procedure) (see page 4, paragraphs 32 and 34); and communicating the signaling and IP connectivity information from the wireless device to the 802.1x network (i.e., the mobile station monitors both the WLAN link and the cellular link, wherein if the WLAN VOIP quality of service drops below an acceptable level, a handoff is triggered. Knowing that the mobile station is still connected to the WLAN network during the determination, the link quality of the cellular network is inherently sent to the WLAN network through the active connection) (see page 4, paragraph 32 and 34, and page 5, paragraph 36).

Regarding claim 8, Jagadeesan discloses a method for initiating a call handoff from a cellular network to an 802.1x network (see paragraph 32), the method being performed by a wireless device (i.e., mobile station 12) (see fig. 2), the method comprising: measuring the strength of a cellular signal being received by a wireless device from a cellular network (i.e., mobile station monitors link quality indicators of the cellular link) (see page 4, paragraph 32); determining whether the strength of the cellular signal has dropped below a certain level (i.e., when the quality of cellular link is less than a handoff trigger threshold) (see page 5, paragraph 42); measuring a strength of an 802.1x signal being received by the wireless device from an access point of an 802.1x network (i.e., monitoring the link quality indicator of the WLAN link) (see page 4, paragraph 32); determining whether the strength of the 802.1x signal is above a certain level (i.e., when the quality of WLAN link is greater than a minimum WLAN link quality threshold) (see page 5, paragraph 42); and wherein if the cellular signal strength is determined to be below a certain level and the 802.1x signal strength is determined to be above a certain level, performing a call handoff from the cellular network to the 802.1x network (see page 3, paragraph 29, and page 5, paragraph 42).

Regarding claim 9, Jagadeesan discloses a method (see claim 8 rejection) further comprising: after the handoff has occurred, severing the connection between the wireless device and the cellular network (i.e., inherently, after a handoff occurred, the connection with the prior network becomes inactive) (see page 5, paragraphs 36 and 42).

Regarding claim 10, Jagadeesan discloses a computer program for initiating a call handoff from a 802.1x network to a cellular network (see abstract and page 3, paragraph 30), the program being embodied on a computer-readable medium (i.e., mobile station 12) (see fig. 2),

Art Unit: 2681

the program comprising: a first code segment, the first code segment determining whether the strength of an 802.1x signal being received by a wireless device from an access point of an 802.1x network has dropped below a certain level (i.e., the mobile station monitors if the link quality indicators of WLAN link is less than a handoff trigger threshold) (see page 4, paragraph 35); a second code segment, the second code segment determining whether the strength of a cellular signal being received by the wireless device from a cellular network is above a certain level (i.e., monitoring if the cellular link is greater than a cellular link minimum threshold) (see page 4, paragraph 35); and a third code segment, if the 802.1x signal strength is determined to be below a certain level and the cellular signal strength is determined to be above a certain level, the third code segment initiating a call handoff from the 802.1x network to the cellular network (i.e., call is handed off. Also, controller may also access information maintained within memory to monitor qualities of links between mobile station and other networks to determine appropriate times to handoff a call between such networks) (see page 3, paragraph 29, and page 4, paragraph 35).

Regarding claim 11, Jagadeesan discloses a computer program for performing initiating a call handoff from a cellular network to an 802.1x network (see abstract and page 3, paragraph 30), the computer program being embodied on a computer-readable medium (i.e., mobile station 12) (see fig. 1), the program comprising: a first code segment, the first code segment determining whether the strength of a cellular signal being received by a wireless device from a cellular network while the wireless device is participating in a call over the cellular network has dropped below a certain level (i.e., when the quality of cellular link is less than a handoff trigger threshold) (see page 4, paragraph 32, and page 5, paragraph 42); a second code segment, the

Art Unit: 2681

second code segment determining whether the strength of an 802.1x signal being received by the wireless device from an access point of an 802.1x network is above a certain level (i.e., when the quality of WLAN link is greater than a minimum WLAN link quality threshold) (see page 5, paragraph 42); and a third code segment, if the cellular signal strength is determined to be below a certain level and the 802.1x signal strength is determined to be above a certain level, the third code segment initiating a call handoff from the cellular network to the 802.1x network (i.e., handoff to WLAN network) (see page 3, paragraph 29, and page 5, paragraph 42).

Regarding claim 12, Jagadeesan discloses an 802.1x network comprising (see abstract): an access point (i.e., AP 24) (see fig. 1, and page 2, paragraph 15); and a server, the server comprising logic configured to determine when a call handoff switch from the 802.1x network to a cellular network is to occur and to communicate with a media gateway to cause the call handoff switch to occur (i.e., Jagadeesan discloses a mobile station which includes logic routines for monitoring quality of links with cellular network and WLAN network, to determine when a handoff of a call from one network to another should triggered) (see pages 3-4, and paragraph 30).

Regarding claim 13, Jagadeesan discloses a cellular network (i.e., cellular network 14) (see fig. 1) comprising: call handoff circuitry configured to determine when a call handoff switch from an 802.1x network to the cellular network is to occur and to communicate with a media gateway (inherent) to cause the call handoff to occur (i.e., Jagadeesan discloses that network communication system may include gateways for enabling communication among the networks and the mobile station, wherein the mobile station comprises a controller which monitors

qualities of links between mobile station and other networks to determine when to perform handoff to another network) (see page 3, paragraphs 23, and 29).

Regarding claim 14, Jagadeesan discloses a server in communication with a media gateway (see fig. 1, and page 3, paragraph 23), the server comprising logic configured to determine when a call handoff switch from a cellular network to the 802.1x network is to occur and to communicate with a media gateway that causes the media gateway to make appropriate connections to cause the call handoff switch to occur (i.e., Jagadeesan discloses that network communication system may include gateways for enabling communication among the networks and the mobile station, wherein the mobile station comprises a controller which monitors qualities of links between mobile station and other networks to determine when to perform handoff to another network) (see page 3, paragraphs 23, and 29).

Regarding claim 15, Jagadeesan discloses a server (see claim 14 rejection) wherein said logic determines whether or not a signal level of a signal of a signal being transmitted from the 802.1x network to a wireless device exceeds a signal level of a signal being transmitted from the cellular network to the wireless device (i.e., Jagadeesan discloses a mobile station which includes logic routines for monitoring quality of links with cellular network and WLAN network, to determine when a handoff of a call from one network to another should triggered, and wherein the mobile station monitors if the link quality indicators of WLAN link is less than a handoff trigger threshold) (see pages 3-4, and paragraph 30, and paragraph 35), said logic determining that a handoff from the 802.1x network to the cellular network should occur when the signal level of the signal being transmitted from the 802.1x network to the wireless device does not exceed the signal level of the signal being transmitted from the cellular network to the wireless

device (i.e., monitoring if the cellular link is greater than a cellular link minimum threshold. And if the link is greater, the call is handed off to the cellular network) (see page 4, paragraph 35).

Regarding claim 16, Jagadeesan discloses a cellular network (i.e., cellular network 14) (see fig. 1) comprising: logic configured to perform a call handoff switch from the cellular network to the 802.1x network so that a call being carried on the cellular network can be switched from the cellular network to the 802.1x network (see pages 3-4, and paragraph 30).

Regarding claim 17, Jagadeesan discloses call handoff switching circuit of a media gateway (i.e., controller 42 of mobile station 12) (see fig. 2, and page 3, paragraph 29), the switching circuit being in communication with an 802.1x network and with a cellular network (mobile station 12 monitors link quality indicators of both WLAN link and cellular link) (see page 4, paragraph 32), the switching circuit comprising: first logic configured to determine if a call handoff is to occur from an 802.1x network to a cellular network (see page 4, paragraph 35) and to determine if a call handoff is to occur from a cellular network to an 802.1x network (see page 5, paragraph 42); and second logic configured to switch a call connection from an address associated with the 802.1x network to an address associated with the cellular network when the first logic determines that a call handoff is to occur from the 802.1x network to the cellular network (i.e., connection to the cellular network) (see page 4, paragraph 35), and configured to switch a call connection from an address associated with the cellular network to an address associated with the 802.1x network when the first logic determines that a call handoff is to occur from the cellular network to the 802.1x network (see page 5, paragraph 42).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

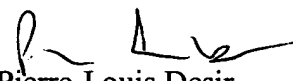
Guo et al., "Vertical Roaming In Wireless Networks Through Improved Quality Of Service Measures," Pub. No. US 2005/0083874.

Jain et al., "Handoff Between Wireless Local Area Network And Cellular Communication System," Pub. No. US 2005/0090259.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is 703-605-4312. The examiner can normally be reached on (571) 272-7799.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Pierre-Louis Desir
AU 2681
09/18/2005

JEAN GELIN
PRIMARY EXAMINER

